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| APPLICATION NO.      | FILING DATE                       | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|----------------------|-----------------------------------|----------------------|---------------------|-----------------|
| 10/797,126           | 03/11/2004                        | Avi Kopelman         | 25537Y              | 4668            |
| 7590 10/04/2005      |                                   |                      | EXAMINER            |                 |
| Gary M. Nath         |                                   |                      | WILSON, JOHN J      |                 |
|                      | OCIATES PLLC<br>et, N.W 6th Floor |                      | ART UNIT            | PAPER NUMBER    |
| Washington, DC 20005 |                                   |                      | 3732                |                 |

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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|--|--|---|--|--|--|
| ,  | Application No.  | Applicant(s)  |  |  |  |
|  | 10/797,126   | KOPELMAN ET AL.   |  |  |  |
| Office Action Summary  | Examiner   | Art Unit  |  |  |  |
| · ·  | John J. Wilson   | 3732  |  |  |  |
| The MAILING DATE of this communication apperiod for Reply  | ppears on the cover sheet w  | ith the correspondence address  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING 10.  - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory perions.  - Failure to reply within the set or extended period for reply will, by statuent Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).  | DATE OF THIS COMMUNI 1.136(a). In no event, however, may a d will apply and will expire SIX (6) MOI ute, cause the application to become A | CATION. reply be timely filed NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133). |  |  |  |
| Status   |  |   |  |  |  |
| 1) Responsive to communication(s) filed on 09  | September 2005.  | ·   |  |  |  |
| 2a) This action is <b>FINAL</b> . 2b) ⊠ Th   |  |   |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |  |   |  |  |  |
| closed in accordance with the practice under   | Ex parte Quayle, 1935 C.   | D. 11, 453 O.G. 213.  |  |  |  |
| Disposition of Claims  |  |   |  |  |  |
| 4) ☐ Claim(s) 1-19 is/are pending in the application 4a) Of the above claim(s) is/are withdrest is/are allowed.  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1-19 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction and.  | awn from consideration.  |   |  |  |  |
| Application Papers   |  |   |  |  |  |
| 9) The specification is objected to by the Examir 10) The drawing(s) filed on is/are: a) acceptable and applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Barrier and the specific and the | ccepted or b) objected to<br>be drawing(s) be held in abeya<br>ection is required if the drawing   | nce. See 37 CFR 1.85(a).<br>I(s) is objected to. See 37 CFR 1.121(d).                                       |  |  |  |
| Priority under 35 U.S.C. § 119   |  | •   |  |  |  |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bure * See the attached detailed Office action for a list   | nts have been received.<br>nts have been received in A<br>iority documents have beer<br>au (PCT Rule 17.2(a)).                             | Application No  received in this National Stage   |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)   | 4) 🔲 Interview   | Summary (PTO-413)   |  |  |  |

U.S. Patent and Trademark Office PTOL-326 (Rev. 7-05)

Paper No(s)/Mail Date \_

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)

5) Notice of Informal Patent Application (PTO-152)

Paper No(s)/Mail Date. \_

6) Other: \_

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The dependency is missing.

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-6, 9, 11, 12 and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taub et al (WO 99/16380) in view of Jordan et al (6152731). Taub shows using a virtual image of at least one tooth and of the orthodontic element in proper position thereon and teaches the virtual image is used on a display and used as a guide while placing an orthodontic element on the patient, page 5, lines 8-14. Taub does not specifically state that the virtual guide is displayed in three dimensions. Jordan teaches displaying in three dimensions, column 8, lines 50-53. It would be obvious to one of ordinary skill in the art to modify Taub to include displaying in three dimensions in order to better view the teeth and orthodontic elements.

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To use different viewpoints is an obvious matter of choice in views used to one of ordinary skill in the art. To use different sets of teeth is an obvious matter of choice in the teeth it is desired to work on to the skilled artisan. As to claim 5, Taub is used to help place brackets, to display in order of bracket placement would be obvious to one of ordinary skill in the art.

Claims 7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taub et al (WO 99/16380) in view of Jordan et al (6152731) and further in view of Hamilton (6413083). The above combination shows the elements as described above, however, does not show the use of a printer. Hamilton teaches using a printer 108. It would be obvious to one of ordinary skill in the art to modify the above combination to include printing information as is well known and shown and suggested by Hamilton in order to make use of known ways of communicating in the art.

Claims 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taub et al (WO 99/16380) in view of Jordan et al (6152731), and further in view of Chishti et al (6227850). The above combination teaches the elements as described above, however, does not show transmitting data to a remote location. Chishti teaches using a remote location, column 14, lines 35-45. It would be obvious to one of ordinary skill in the art to modify the above combination to include using a remote location as shown by Chishti in order to more conveniently provide orthodontic planning.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Taub et al (WO 99/16380) in view of Jordan et al (6152731), and further in view of Sachdera et al (6350120).

The above combination shows the elements as described above, however, does not show the use of a database of virtual brackets. Sachdera teaches using a library of virtual brackets, column 6, lines 25-31. It would be obvious to one of ordinary skill in the art to modify the above combination to include using a database of virtual brackets as shown by Sachdera in order to better simulate the brackets intended to be placed on the teeth.

#### Terminal Disclaimer

The terminal disclaimer filed September 9, 2005 successfully removes a double patenting rejection based on Patent No. 6,334,772.

## Response to Arguments

Applicant's arguments filed September 9, 2005 have been fully considered but they are not persuasive. Taub et al (WO 99/16380) does teach using a virtual image as a visual guide as pointed out in the rejection above.

### Conclusion

Prior art cited: Vielfaure (FR 2656215) shows a system for guiding the mounting of brackets.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Wilson whose telephone number is 571-272-4722). The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P. Shaver, can be reached at 571-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John J. Wilson Primary Examiner Art Unit 3732

J. Wills

jjw September 28, 2005